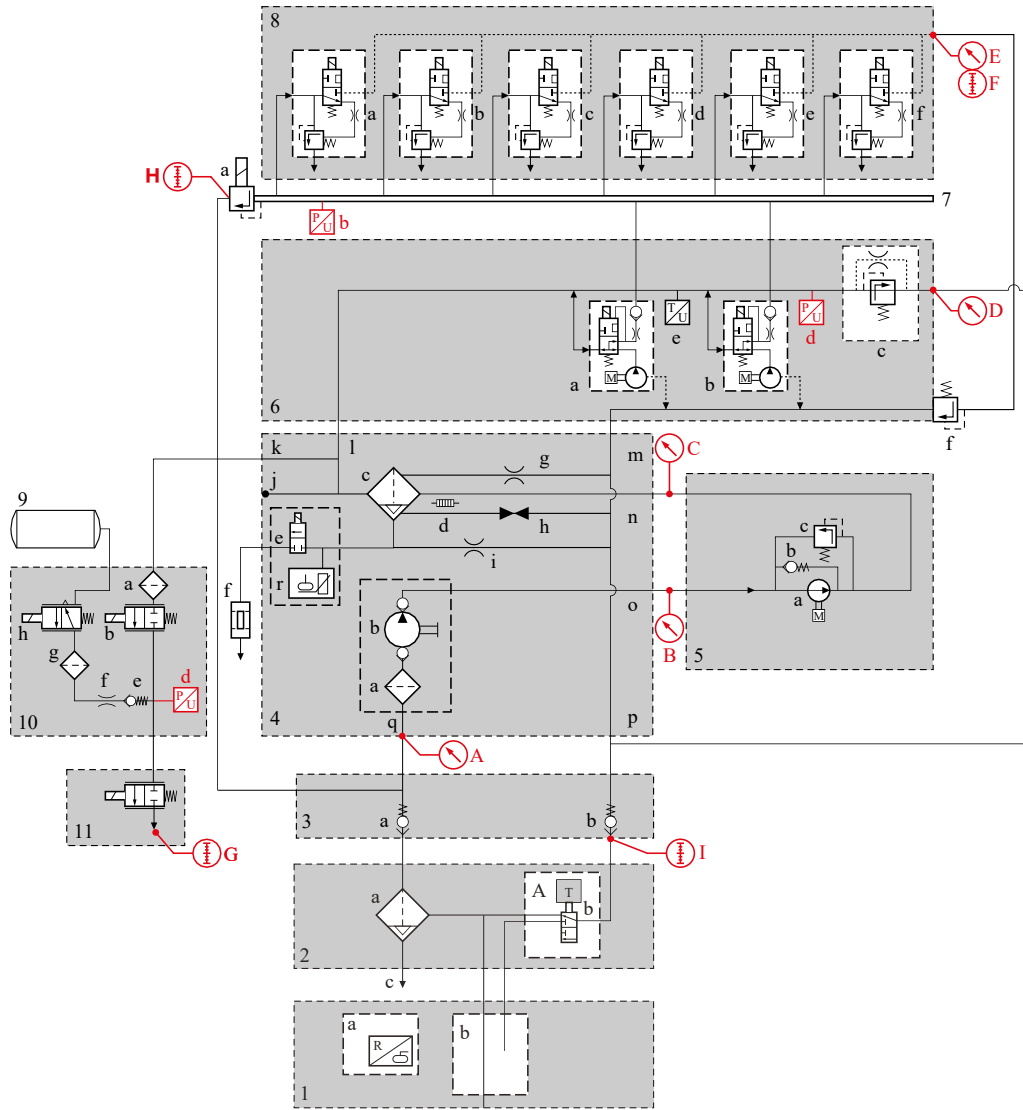


Overview, fuel system

Fuel system MX-13 engine



1406208-2

- A If fuel blender
- 1 Fuel tank
- 1a Level sensor
- 1b Fuel pick-up
- 1c Water drain valve

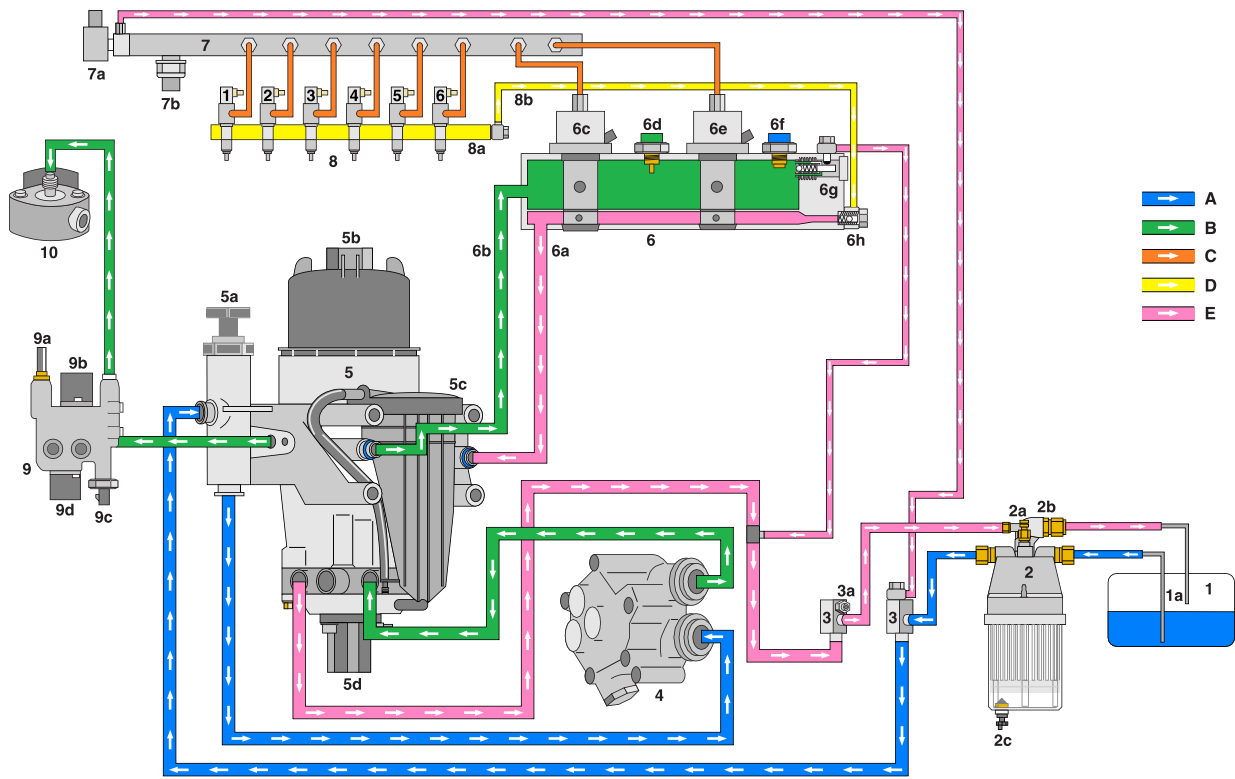
- 2 Chassis pre-filter
- 2a Filter and water separator element
- 2b Fuel blender
- 3 ["Engine-chassis fuel interface"](#)
- 3a ["Shutoff valve, fuel supply line"](#)
- 3b ["Shutoff valve, fuel return line"](#)
- 3c ["Shutoff valve"](#), (used during engine/vehicle production)
- 4 ["Fuel filtration module \(L097\)"](#)
- 4a ["Fuel sieve"](#)
- 4b ["Hand priming pump"](#)
- 4c Filter and water separator element
- 4d Fuel heater
- 4e ["Water drain valve"](#)
- 4f ["Activated Carbon canister"](#)
- 4g Orifice for bleeding
- 4h Drain line (filter change)
- 4i Water overflow (redundancy)
- 4j Not used
- 4k Supply fuel intake module (EAS)
- 4l Fuel connection to gallery
- 4m Fuel return from gallery
- 4n Fuel inlet from lift pump
- 4o Fuel to lift pump
- 4p Fuel return to tank
- 4q Fuel inlet
- 4r ["Water in fuel sensor"](#)
- 5 ["Fuel lift pump"](#)
- 5a Gear pump
- 5b Bypass valve
- 5c Pressure release valve
- 6 Cylinder block
- 6a ["Common rail pump unit 1 \(L092\)"](#)
- 6b ["Common rail pump unit 2 \(L093\)"](#)
- 6c ["Fuel pressure control valve"](#)
- 6d ["Fuel pressure sensor \(F801\)"](#)
- 6e ["Fuel temperature sensor \(F803\)"](#)
- 6f ["Injector back leak valve"](#)
- 7 ["Common rail"](#)
- 7a ["Common rail pressure release valve \(L094\)"](#)
- 7b ["Common rail pressure sensor \(F854\)"](#)
- 8 Cylinder head
- 8a ["Solenoid valve injector \(B421\)"](#)
- 8b ["Solenoid valve injector \(B422\)"](#)
- 8c ["Solenoid valve injector \(B423\)"](#)
- 8d ["Solenoid valve injector \(B424\)"](#)
- 8e ["Solenoid valve injector \(B425\)"](#)
- 8f ["Solenoid valve injector \(B426\)"](#)
- 9 Air supply
- 10 ["Fuel intake module \(L135\)"](#)

- 10a Fuel filter
- 10b ["Fuel shutoff valve"](#)
- 10d ["Pressure sensor \(Fuel intake module\)"](#)
- 10e Check valve
- 10f Orifice
- 10g Air filter
- 10h ["Air shutoff valve"](#)
- 11 ["Fuel dosing module \(L124\)"](#)

Fuel system measuring points

Measuring point	Description	Additional information
A	Pressure before the manual fuel lift pump (suction side) (P4)	See job (Check fuel system low pressure)
B	Pressure after the manual fuel lift pump (suction side) (P2)	
C	Pressure after fuel lift pump (pressure side) (P3)	
D	Pressure return pipe to fuel tank (P5)	
E	Pressure injector leak (P6)	
F	Injector leak flow	DAVIE4 test 'Evaluate the injector back leak' in DAVIE4 in combination with job (Check fuel system high pressure)
G	Fuel dosing module delivery	See job (Checking fuel delivery dosing module, fuel)
	Fuel dosing module leakage	See job (Checking leakage dosing module, fuel)
H	Common rail pressure release valve leakage	DAVIE4 test 'Evaluate the injector back leak' in DAVIE4 in combination with job (Check fuel system high pressure)
I	Fuel flow in fuel tank return pipe	See job (Check fuel flow fuel tank return pipe)
6d	Fuel pressure in gallery from PCI ECU (D420) (P1)	Fuel pressure (Relative) in the DAVIE PCI application. For specifications, see technical data of job (Check fuel system low pressure)
7b	Common rail pressure from PCI ECU (D420)	Rail pressure in the DAVIE PCI application
10d	Fuel intake module - fuel pressure from EAS-3 ECU (D374)	Intake module fuel pressure in the DAVIE EAS-3 application

Fuel system flow overview MX-13 engine



I405006-3

- A Suction
- B Low pressure
- C Boost Pressure
- D Injector return
- E Return
- 1 Fuel tank
- 1a Stand pipes
- 2 Chassis filter
- 2a Test connection (for monitoring fuel filter restriction)
- 2b Fuel blend valve
- 2c Water drain valve
- 3 Engine-chassis fuel interface
- 3a Bleed port
- 4 Fuel lift pump
- 5 Fuel filtration module (L097)
- 5a Hand priming pump
- 5b Filter and water separator element
- 5c Activated Carbon canister
- 5d Water in fuel sensor/Water drain valve
- 6 Low-pressure fuel gallery
- 6a Fuel return passage in the engine block
- 6b Fuel supply passage in the engine block
- 6c Common rail pump unit 1 (L092)
- 6d Fuel temperature sensor (F803)
- 6e Common rail pump unit 2 (L093)
- 6f Fuel pressure sensor (F801)

- 6g Fuel pressure control valve
- 6h Injector back leak valve
- 7 Common rail
- 7a Common rail pressure release valve (L094)
- 7b Common rail pressure sensor (F854)
- 8 Injectors
- 8a Injector back leak passage in cylinder head
- 8b Injector back leak return
- 9 Fuel intake module (L135)
- 9a Air supply
- 9b Air shutoff valve
- 9c Fuel pressure sensor
- 9d Fuel shutoff valve
- 10 Fuel dosing module (L124)

M036845 - 02/12/2019

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